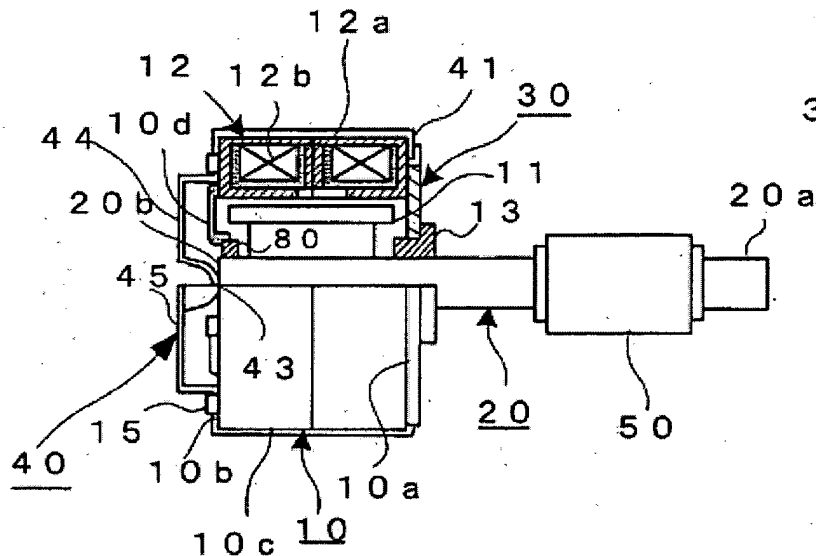


REMARKS/ARGUMENTS

Claims 1-5, 9, and 11-12 are amended by this response. Claims 6-8 and 13-15 are canceled. Accordingly, claims 1-5 and 9-12 remain pending.

Embodiments in accordance with the present invention relate to a motor structure including a thrust member designed to prohibit a rotary shaft from moving axially in a rearward direction. As discussed in connection with Figure 1B:



When the worm gear 50 rotates in a direction so as to generate axial force urging the rotary shaft 20 rearward (toward the rear end face 20b), the rotary shaft 20 is held from moving rearward by means of the thrust member 40 resiliently pressing the rear end face 20b of the rotary shaft 20 frontward. Thus, the rotor 11 is prevented from touching the rear end plate 10 or the bearing 80. (See page 8, lines 23 - page 9, line 1).

As further described at page 7, lines 19-20 of the instant application, this thrust member may be formed by stamping and bending a metal sheet.

Accordingly, independent claim 1 has now been amended to recite as follows:

1. A motor comprising:
 - a cylindrical motor body comprising a hollow cylindrical stator, a front end plate, a front end face, and a rear end plate;
 - a rotor being fixedly attached to a rotary shaft wherein the rotary shaft has a front end portion that sticks out of the front end face of the motor body;

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a thrust member which is formed by stamping and bending a metal sheet, the thrust member comprising:

at least two arm segments attached to predetermined areas on an outer surface of the motor body;

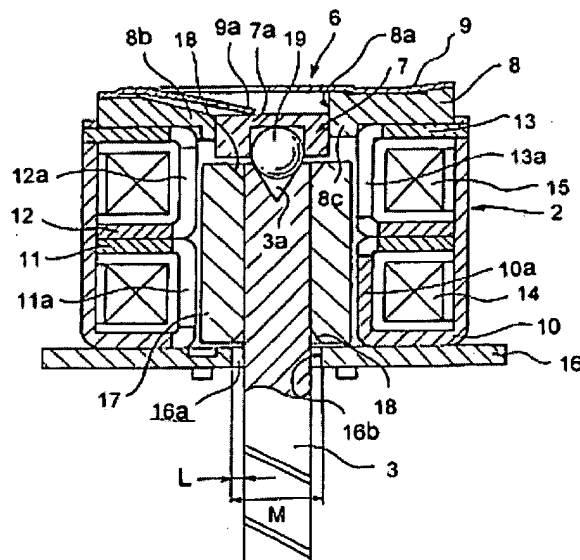
a hump segment to touch the rear end face of the rotary shaft, the hump segment being shaped such that it prohibits the rotary shaft only from axially moving in a rearward direction when the thrust member is mounted on the motor with the arm segments being attached to the predetermined areas on the outer surface of the motor body; and

at least two shoulder segments to bridge the arm segments and the hump segment and to urge the hump segment toward the rotary shaft. (Emphasis added)

In the latest office action, the Examiner rejected the pending claims as obvious under 35 U.S.C. 103 based upon U.S. Patent No. 5,811,903 to Ueno et al. ("the Ueno Patent"), taken in combination with JP Patent Document 10-271735 to Krauth ("the Krauth application"). These claim rejections are traversed as follows.

A first requirement to establish a prima facie case of obviousness is that "the prior art reference (or references when combined) must teach or suggest all of the claim limitations." (MPEP 2143). Here, the references relied upon by the Examiner to reject the claims, fail to teach each and every element recited in the pending claims.

Specifically, while the Ueno Patent does describe a motor structure, as is apparent from Figure 1 (reproduced in part below) of that reference, spring element 9a urges the rear end face of rotation shaft 3 via ball support member 20 and ball 19:



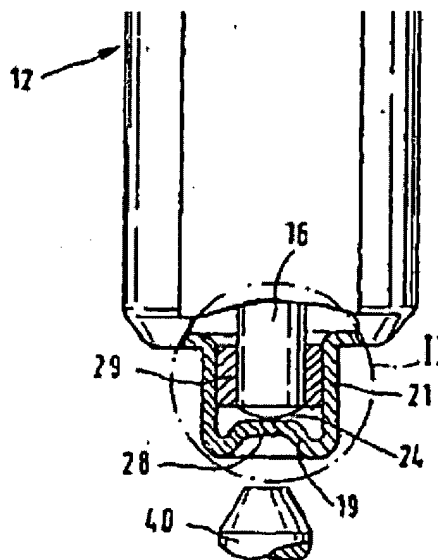
Spring element 9a and the rear end face of rotation shaft 3 are not in contact.

Accordingly the Ueno Patent does not teach, or even suggest, a motor including a thrust member comprising a hump segment to touch the rear end face of rotary shaft 3. It is also noted that the Ueno Patent fails to teach or suggest a thrust member formed by stamping and bending a metal sheet.

Further, in the illustrated embodiment of the Ueno Patent, because the rear end face of rotation shaft 3 and ball 19 come in line contact, the torque loss easily occurs.

In an attempt to provide the teaching that is absent from the Ueno Patent, the Examiner has combined this reference with the Krauth Application. However, even when combined, the references relied upon by the Examiner fail to teach or suggest every aspect of the pending claims.

Specifically, Figure 1 of the Krauth Application is reproduced in part below:



The Krauth Application discloses a unit in which corresponding shoulder part 28 formed on bottom 19 of protrusion 21 is configured to contact the rear end of worm shaft 16. However, corresponding shoulder part 28 described in the Krauth Application is integrally formed with casing 20 or motor 12. Shoulder part 28 of the Krauth Application is thus not a separate thrust member formed by stamping and bending a metal sheet. Moreover, shoulder part 28 does not have elastic properties, and thus does not appear to urge the rear end face of the rotation shaft 11a.

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Based upon the failure of the art relied upon by the Examiner to teach, or even suggest all of the elements of the pending claims, it is respectfully asserted that continued maintenance of the outstanding claim rejections is improper, and these claim rejections should be withdrawn.

Finally, it is noted that claim 1 recites that the motor also includes a front end plate and a rear end plate. Neither the Ueno Patent nor the Krauth Application teach or suggest these claim elements. Thus for this additional reason, continued assertion of the obviousness rejections is improper, and these claim rejections should be withdrawn.

In view of the foregoing, Applicants believe all claims now pending in this Application are in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested. If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 650-326-2400.

Respectfully submitted,



Kent J. Tobin
Reg. No. 39,496

TOWNSEND and TOWNSEND and CREW LLP
Two Embarcadero Center, Eighth Floor
San Francisco, California 94111-3834
Tel: 650-326-2400
Fax: 415-576-0300
KJT:ejt
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